## U. S. Department of Energy Energy Policy Act of 2005, Section 1234 Economic Dispatch Study Questions for Stakeholders

## Response

of

Monongahela Power Company, The Potomac Edison Company and West Penn Power Company, all doing business as Allegheny Power, and Allegheny Energy Supply Company, LLC (AE Supply) (September 21, 2005)

**Question 1:** What are the procedures now used in your region for economic dispatch? Who is performing the dispatch (a utility, an ISO or RTO, or other) and over how large an area (geographic scope, MW load, MW generation resources, number of retail customers within the dispatch area)?

**Response:** Allegheny Power and AE Supply follow the direction of the PJM Interconnection, LLC (PJM), an RTO, which is responsible for performing and monitoring economic dispatch procedures. PJM's scope includes 163,806 megawatts of generating capacity and a peak demand of 131,330 megawatts in portions of 13 states and the District of Columbia with a population of approximately 51 million. Additional information about PJM and its economic dispatch procedures is available on its website at www.pjm.com.

**Question 2:** Is the Act's definition of economic dispatch (see above) appropriate? Over what geographic scale or area should economic dispatch be practiced? Besides cost and reliability, are there any other factors or considerations that should be considered in economic dispatch, and why?

**Response:** Yes, the definition is appropriate. Economic dispatch should be practiced over the entire footprint of the RTO/ISO or the entire service area of a utility, if not part of an RTO/ISO. Coordination must also be established and maintained with any adjacent RTO/ISO or utility (if not a part of an RTO/ISO) to address any seams issues.

**Question 3:** How do economic dispatch procedures differ for different classes of generation, including utility-owned versus non-utility generation? Do actual operational practices differ from the formal procedures required under tariff or federal or state rules, or from the economic dispatch definition above? If there is a difference, please indicate what the difference is, how often this occurs, and its impacts upon non-utility generation and upon retail electricity users. If you have specific analyses or studies that document your position, please provide them.

**Response:** Within PJM, economic dispatch procedures do not differ between utility-owned and non-utility generation. Each generator in PJM that desires to participate in economic dispatch within the RTO must offer its generator operational and price parameters to the market for inclusion in the economic dispatch analysis.

**Question 4:** What changes in economic dispatch procedures would lead to more non-utility generator dispatch? If you think that changes are needed to current economic dispatch procedures in your area to better enable economic dispatch participation by non-utility generators, please explain the changes you recommend.

**Response:** Because economic dispatch procedures do not differ between utility-owned and non-utility generation within PJM, AE Supply and Allegheny Power do not believe changes are needed to PJM's current economic dispatch procedures.

**Question 5:** If economic dispatch causes greater dispatch and use of non-utility generation, what effects might this have – on the grid, on the mix of energy and capacity available to retail customers, to energy prices and costs, to environmental emissions, or other impacts? How would this affect retail customers in particular states or nationwide? If you have specific analyses to support your position, please provide them to us.

Response: Within PJM and mostly likely other RTOs and ISOs, the existing transmission system was planned and designed to meet the needs of individual vertically integrated public utilities and was not planned and designed to accommodate economic dispatch as it is currently performed in markets that exist in PJM and other RTOs and ISOs. Consequently, transmission upgrades and reinforcements are needed to maintain a reliable and vibrant grid to meet the needs of regional markets. Planning base case models currently in use do not accurately reflect regional economic dispatch and, therefore, do not identify needed upgrades and reinforcements that would mitigate existing operational problems that are not identified in long-term planning studies. One possible solution would be to change the NERC planning criteria to include economic dispatch in base cases so that upgrades and reinforcements need for reliability purposes will be readily identified. These upgrades and reinforcements would be classified as needed for reliability because, if not made, loads will be exposed to a higher probability of load shed due to congestion and constraints on the grid.

**Question 6:** Could there be any implications for grid reliability – positive or negative – from greater use of economic dispatch? If so, how should economic dispatch be modified or enhanced to protect reliability?

**Response:** As stated in response to Question 4, AE Supply and Allegheny Power do not believe changes are needed to PJM's current economic dispatch procedures.

However, as discussed in response to Question 5, some changes may be needed to the transmission planning and design process to address grid reliability.